

I claim:

1. A method for treating sensorineural cochlear hearing loss in a subject,
comprising administering a therapeutically effective dose of a composition
5 comprising fludrocortisone or a mimetic or analog thereof to the subject, wherein the
composition comprising fludrocortisone treats the hearing loss in the subject.

2. The method of claim 1, wherein the subject has an autoimmune disease
that results in hearing loss.

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3. The method of claim 2, wherein the autoimmune disease is Wegener's
granulomatosis, polyarteritis nodosa, or systemic lupus erythematosus.

4. The method of claim 1, wherein the subject has a sudden and idiopathic
15 hearing loss.

5. The method of claim 1, wherein the subject has endolymphatic hydrops or
Meniere's disease.

20 6. The method of claim 1, wherein the fludrocortisone is fludrocortisone
acetate.

7. The method of claim 1, wherein the hearing loss is a reduction in hearing
in the subject by at least 20% as compared to hearing in a normal ear.

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8. The method of claim 7, wherein the hearing loss is a reduction in hearing
in the subject by at least 50% as compared to hearing in a normal ear.

9. The method of claim 1, wherein the subject has hearing loss in one ear.

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10. The method of claim 1, wherein the subject has hearing loss in both ears.

11. The method of claim 1, wherein the hearing loss is caused by abnormal sodium-potassium imbalance in endolymph of a stria vascularis of the subject.

12. The method of claim 1, wherein administration of the composition
5 decreases sodium-potassium imbalance in an endolymph of a stria vascularis of the subject.

13. The method of claim 1, wherein administration of the composition
10 increases sodium transport in a stria vascularis.

14. The method of claim 13, the sodium transport increases by at least 10%
in the stria vascularis.

15. The method of claim 1, wherein administration of the composition
15 comprising fludrocortisone increases sodium and potassium transport in a stria vascularis.

16. The method of claim 1, wherein the composition comprising
20 fludrocortisone further comprises a pharmaceutically acceptable carrier.

17. The method of claim 1, wherein the method further comprises
administering a glucocorticoid to the subject.

18. The method of claim 17, wherein the composition comprising
25 fludrocortisone further comprises the glucocorticoid.

19. The method of claim 17 or 18, wherein the glucocorticoid is prednisone.

20. The method of claim 19, wherein the prednisone is administered at a
30 dose of about 60-800 $\mu\text{g/kg/day}$.

21. The method of claim 1, wherein the composition is administered orally.

22. The method of claim 1, wherein the composition is administered to the middle ear.

5 23. The method of claim 1, wherein the composition is administered transtympanically

24. The method of claim 1, wherein the administration of the composition increases hearing by at least 10% as compared to hearing prior to administration of
10 the composition.

25. The method of claim 1, wherein the administration of the composition increases hearing by at least 20% as compared to hearing prior to administration of the composition.
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26. The method of claim 1, wherein the fludrocortisone is administered at a dose of about 100-200 $\mu\text{g/kg/day}$.

27. A composition comprising a therapeutically effective amount of
20 fludrocortisone and a glucocorticoid.